

REMARKS

The amendment to claim 7 defining the sequence of cooling followed by stretching raises no new issue and requires no further search because a corresponding limitation was in claim 20 as previously examined.

Claim 8 has been amended responsive to paragraph 2 of the office action to clarify that claim 8 serves to further define the heating step of claim 7.

The rejection of claims 7 and 9-19 for obviousness over Mathis in view of Matthews et al is respectfully traversed. As noted above, claim 7 has been amended to clarify that the stretching occurs only after cooling. As shown in Fig. 1 and as described in paragraphs 24 and 29 of applicants' Substitute Specification, the cooling means consists of one roll of calender 5 and is followed downstream by transverse stretching and longitudinal stretching. As described in paragraphs 24 and 25 the cooling during "further calendering" subjects the film to a thermal shock and stops the stabilization process. In paragraph 27 applicants teach:

It has been found that the thermal shock to which the film is subjected provides improved transpirability during the successive stretching operations.

Accordingly, in keeping with applicants' objective of providing improved transpirability, the thermal shock by cooling must precede the successive stretching operations.

Neither Mathis nor Matthews suggests such a process, either alone or in combination.

As the examiner notes in the second sentence at page 3 of the office action, "Matthews

et al discloses collapsing a bubble film, heating it to bond the layers together while longitudinally stretching it and then... [emphasis added]. Thus, as the examiner acknowledges, the heating in Matthews is adopted in connection with the stretching. At column 5, lines 49-63 Matthews teach that their first machine direction stretching is effected between the A rolls and the B rolls, all of which are heated. Thus, it would be inconsistent with the teachings of Matthews to first cool the double layer film and then stretch the cooled film. Matthews is not in any way concerned with producing a transpiring (semipermeable) film. In the process of Matthews the extruded film is machine-direction stretched between heated A rolls and heated B rolls, is then transversely stretched (column 5, line 64 to column 6, line 2), machine direction stretched again between rolls C and D (column 6, lines 12-16) and then cooled in passage over roll D (column 6, line 12). Accordingly, even if it were obvious to produce the double layer transpiring film of Mathis by the successive steps taught by Matthews et al, as asserted by the examiner, the result would not be applicants' process as defined by claim 7 because the cooling would not precede the stretching and the stretching would not benefit from the effect of thermal shock of cooling to produce the improved transpirability which is the object of the present invention as is taught in paragraph 27 of applicants' Substitute Specification.

The rejection of claims 8 and 20 over Mathis et al in view of Matthews and further in view of Van Cappellen, as set forth in paragraph 5 of the office action, is respectfully traversed for the reason that, firstly the additional citation of Van Cappellen does not serve to cure the deficiency of the combination of Mathis and Matthews noted above.

Secondly, it is considered that since Van Cappellen teaches an apparatus for stretching a single layer polyolefin that is not transpiring, there would be no apparent reason to combine the teachings of Van Cappellen with Mathis which is directed to a double layer transpiring film. With regard to claim 20, note that claim 20 requires the stretching means to be arranged in a series following the cooling means.

The rejection of claims 7, 10-13 and 16-19 over Kagawa in view of Matthews is also traversed. Here too the examiner acknowledges that his primary reference (Kagawa) does not recite process steps in the sequence recited by the rejected claims and, for a teaching of such a sequence, again relies upon teachings of Matthews et al. However, as noted above, Matthews et al in no way suggests subjecting the film to cooling (to produce a thermal shock) prior to the stretching and in no way hints that the cooling preceding stretching would serve to improve transpirability as noted in paragraph 27 of applicants' Substitute Specification. As noted above, Matthews does not produce a transpirable film and therefore does not seek to improve transpirability.

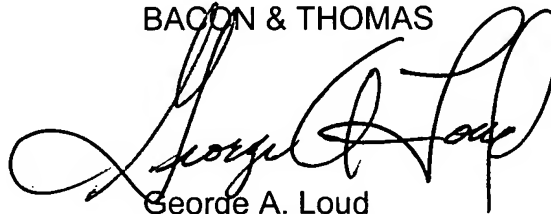
The rejection of claims 8 and 20 for obviousness over Kagawa in view of Matthews and further in view of Van Cappellen, as set forth in paragraph 7 of the office action, is also traversed. Firstly, Van Cappellen does not cure the defects of the combination of Kagawa and Matthews. Secondly, it is considered that since Van Cappellen teaches an apparatus for stretching a single layer polyolefin that is not transpiring, there would be no apparent reason to combine the teachings of Van Cappellen with Mathis which is directed to a double layer transpiring film.

Finally, the rejection of claim 20 for obviousness over Matthews et al in view of Van Cappellen is traversed, again for the reason that Matthews et al do not disclose or suggest applicants' apparatus for achieving improved transpirability, i.e., apparatus elements arranged in a series with a cooling unit (to produce a thermal shock) upstream of stretching means. Thus, Matthews does not in any way suggest placing a cooling means in series between a calender for pressing and uniting (laminating) the layers of a double layer flat film and a stretching means. Van Cappellen relates to stretching of a single layer film and therefore has no relevance to this deficiency of the Matthews et al reference. Matthews et al is not directed to production of any type of transpiring film. Likewise, Van Cappellen does not disclose apparatus intended to produce any type of transpiring film and cannot be suggestive of modification of Matthews et al for that purpose.

In conclusion, it is respectfully requested that the examiner reconsider the rejections of record with a view toward allowance of the claims as amended.

Respectfully submitted,

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A large, stylized handwritten signature in black ink, appearing to read "George A. Loud".

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Dated:

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